



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,480	10/24/2005	Paul F. Ierymenko	9682-2	7232
20792 7590 06/27/2008 MYERS BIGEL, SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627				
EXAMINER FLETCHER, MARLON T				
ART UNIT		PAPER NUMBER		
2837				
MAIL DATE		DELIVERY MODE		
06/27/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/554,480

Applicant(s)

IERYMENKO, PAUL F.

Examiner

Marlon T. Fletcher

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 99-149 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 99, 101, 103, 104, 106, 107, 109, 138, 139, 141-146, 148 and 149 is/are rejected.
- 7) ☒ Claim(s) 100, 102, 105, 108, 110-137, 140 and 147 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 99, 101, 103, 104, 106-107, 109, 138, 139, 141-146, 148, and 149, are rejected under 35 U.S.C. 102(e) as being anticipated by Gillette (2006/0117938).

Gillette discloses a system for controlling and modifying the vibratory motion of at least one string of a stringed musical instrument comprising: a) transducer means (32) associated with at least one string for providing a sensing signal representative of string vibration and for applying a force to said at least one string in accordance with an actuating signal; b) at least one motion controller (36) associated with said transducer means and responsive to said sensing signal to form said actuating signal for selectively damping and/or exciting the vibratory motion of the string or selected harmonics thereof; and c) user control means to provide the musician with control over the behavior of said at least one motion controller (page 3, paragraph 47).

Gillette discloses the system wherein said transducer means is composed of at least one sensing transducer for providing a sensing signal representative of string vibration and at least one separate actuating transducer for applying a force to said at least one string in accordance with an actuating signal (page 2/3, paragraph 42); and

wherein said at least one motion controller is an adaptive control system coupled to said sensing transducer and to said separate actuating transducer and arranged to respond to said sensing signal and to provide and adaptively adjust the characteristics of said actuating signal to maintain control of said vibratory motion of the string (page 2/3, paragraph 42; and abstract).

Gillette discloses the system including at least one secondary sensing transducer for providing a secondary sensing output signal in accordance with the motion of at least one string (figure 5).

Gillette discloses the system further including a mixer for combining various signals of the system into a composite audio output signal (figure 7).

Gillette discloses the system including an external input for supplying an external signal to modify the vibratory motion of a said string (abstract).

Gillette discloses the system wherein said user control means includes at least one control that is manually operable by the musician for control of system behavior (page 3, paragraph 47).

Gillette discloses the system wherein said actuating signal is a correction signal for reducing the deviation of the string's motion from a desired motion (figure 9).

Gillette discloses the method of claim 142 including providing a storage array of reference signals and further including converting selected extracted feature signals to indices for addressing the storage array to supply reference signals to said motion controller (page 3, paragraph 47).

Gillette discloses the method including providing a storage array of pre-specified command phrases and instrument definitions and having a player-selectable instrument redefinition mode wherein the occurrence of a said pre-specified command phrase consisting of one or a sequence of notes causes the instrument definition to be changed accordingly (page 3, paragraph 47).

Allowable Subject Matter

3. Claims 100,102, 105, 108, 110-137, 140, and 147, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marlon T. Fletcher whose telephone number is 571-272-2063. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2837

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MTF
06/23/2008

/Marlon T Fletcher/
Primary Examiner, Art Unit 2837